AMENDMENTS TO THE CLAIMS

Please cancel claims 4, 5 and 16 without prejudice or disclaimer of any of the subject matter contained therein.

1. (Currently Amended) A method of determining wear of composite material brake disks of a road vehicle which comprises:

calculating, at each deceleration of the vehicle, ~~the~~a kinetic energy differential (DEk) of the vehicle induced by the deceleration;

determining, as a function of the kinetic energy differential (DEk) of the vehicle, an instantaneous value (Ed) of ~~the~~an energy dissipated by the brake disks during deceleration;

determining a mean value of the kinetic energy differential (DEk) of the vehicle within a given time interval;

determining, at each deceleration of the vehicle, an estimation of the temperature of the brake disks during deceleration as a function of the mean value of the kinetic energy differential (DEk)~~,~~;

determining, on the basis of the value (Ed) of the energy dissipated by the brake disks during deceleration and on the basis of the determined estimation temperature of the brake disks during deceleration, an instantaneous wear contribution (u) of the brake disks during deceleration; and

updating a total wear value (U) of the brake disks by adding the instantaneous wear contribution (u) of the brake disks during deceleration to the previous total wear value (U).

2. (Previously Presented) The method of Claim 1, wherein, upon deceleration of the vehicle, a corresponding instantaneous value (Ed) of the energy dissipated by the brake disks during deceleration is only determined if the braking action of the brake system of the vehicle is actually used during deceleration.

3. (Previously Presented) The method of Claim 1, wherein, at each deceleration, the energy contribution caused by the braking action of friction on the vehicle is determined; the energy contribution caused by the braking action of friction on the vehicle being taken into account to determine the instantaneous value (Ed) of the energy dissipated by the brake disks during deceleration as a function of the kinetic energy differential (DEk) of the vehicle.

4. (Canceled)

5. (Canceled)

6. (Previously Presented) The method of Claim 1, wherein determining the estimation of the temperature of the brake disks during deceleration comprises performing a braking mode assessment; the instantaneous wear contribution (u) of the brake disks during deceleration being determined on the basis of the value (Ed) of the energy dissipated by the brake disks during deceleration, and on the basis of the braking mode assessment as an indication of the estimation of the temperature of the brake disks during deceleration.

7. (Currently Amended) The method of Claim 6, wherein ~~a mean value of the kinetic energy differential (DEk) of the vehicle within a given time interval is determined;~~ the braking mode assessment ~~being~~is determined as a function of the mean value of the kinetic energy differential (DEk).

8. (Previously Presented) The method of Claim 1, wherein the instantaneous value (Ed) of the energy dissipated by the brake disks during deceleration is assumed to be equal to the kinetic energy differential (DEk) of the vehicle; the instantaneous wear contribution (u) of the brake disks during deceleration being determined by multiplying the value (Ed) of the energy dissipated by the brake disks during deceleration by a multiplication constant (K) ranging between 0 and 1.

9. (Currently Amended) The method of Claim 8, wherein ~~a mean value of the kinetic energy differential (DEk) of the vehicle within a given time interval is determined;~~ the multiplication constant (K) ~~assuming~~assumes different values as a function of the mean value of the kinetic energy differential (DEk).

10. (Previously Presented) The method of Claim 8, wherein the multiplication constant (K) may assume different values corresponding, respectively, to normal use of the vehicle and extreme use of the vehicle.

11. (Previously Presented) The method of Claim 9, wherein the time interval in which to determine the mean value of the kinetic energy differential (DEk) of the vehicle ranges between 0, 1 and 5 seconds.

12. (Previously Presented) The method of Claim 1, wherein the total wear value (U) of the brake disks is divided between the front brake disks and the rear brake disks as a function of a constant distribution ratio.

13. (Previously Presented) The method of Claim 1, wherein the total wear value (U) of the brake disks comprises a total wear value (Ua) of the front brake disks, and a total wear value (Up) of the rear brake disks; the instantaneous wear contribution (u) of the brake disks during deceleration being divided between the two total values (Ua, Up) as a function of a variable distribution ratio.

14. (Previously Presented) The method of Claim 13, wherein the distribution ratio is calculated at each deceleration as a function of the initial and final speed values (V1, V2) of the deceleration.

15. (Previously Presented) The method of Claim 1, wherein a signal is generated when the total wear value (U) of the brake disks exceeds a given threshold.

16. (Canceled)